

Howard C. Johnson, Director



EPA Region 5 Records Ctr.



309399

June 8, 1984

Mr. Tom Budzik
25W154 Argyle
Keeneyville, IL 60172

Dear Tom:

As requested, please find attached the latest monitoring results of Mallard Lake Landfill.

In the future, sampling and analysis data can be obtained at the Helen Plum Library. The District will be submitting landfill data on an annual basis to the library.

If you have any questions regarding the attached data, please call.

Sincerely,

Richard L. Utt
Superintendent of Landfill

mm

cc: E. Heil
C. Liska (Illinois EPA)

Attachment



TESTING SERVICE CORPORATION

457 East Gundersen Drive, Carol Stream, Illinois 60188

Consultation services
Foundation and site exploration
Testing of soils, concrete
and bituminous materials
Groundwater monitoring and
hydrogeologic studies

Telephone 312 653-3920

May 31, 1984

FOREST PRESERVE DISTRICT OF
DU PAGE COUNTY
P. O. Box 2339
Glen Ellyn, Illinois 60138

Attention: Mr. Scott Gerrick

RE: L - 19,559A
MALLARD LAKE SITE

Dear Mr. Gerrick,

We have completed the April 1984 purging and sampling work for the monitoring wells in connection with the above referenced site and have received the test results from Aqualab, Inc. Field procedures are as previously outlined.

The water level measurements and water sample temperatures are shown on the enclosed Field Data Chart.

The water samples were analyzed for the following six (6) parameters; pH, Total Dissolved Solids, Chloride, Fe, Pb and Zn. In addition to the above, extra samples were taken for Monitoring Wells G-103, G-106 and G-112 for analysis of the following parameters: Alkalinity, Arsenic, Cadmium, Calcium, Sulfate, Chromium, COD, Copper, Tin, Hardness, Magnesium, Manganese, Mercury Nickel, Phenol and Potassium. The identity of the samples can be determined by the enclosed Chain of Custody Record. Two QA splits were taken as indicated.

We have reviewed the analytical data and have compared the first group of six (6) parameters listed above (for which we have background data) to the results of the previous four quarters. No unusual or significant changes were noted.

Dr. Lawrence A. DuBose
President

Charles C. Luther
Executive Vice-President

Lyle E. Thompson
Vice-President

Noble D. Moran
Vice-President

Bruce Poynor
Engineering Geologist

May 31, 1984


FOREST PRESERVE DISTRICT OF DU PAGE COUNTY
Attention: Mr. Scott Gerrick

Page 2
L - 19,559A

It has been a pleasure to assist you with this project. Please call if there are any questions.

Respectfully submitted,

TESTING SERVICE CORPORATION



Lawrence A. DuBose
President

LAD:BP:js

Prepared by:



Bruce Poynor
Engineering Geologist

Enclosures: Field Data Chart
Aqualab, Inc. Analytical Report
Chain of Custody Record

FIELD DATA CHART					
MONITORING WELL	WATER LEVEL				WATER TEMPERATURE °F
	DEPTH* IN FEET AND ELEVATION				
	PRIOR TO PURGING 4-20-84		PRIOR TO SAMPLING 4-23-84		
G-101S	11.93	(792.71)	18.81	(785.83)	51
G-101D	37.75	(766.83)	46.37	(758.21)	49
G-102	44.19	(764.76)	44.58	(764.37)	51
G-103	43.87	(757.41)	54.00	(747.28)	52
G-104A	59.30	(735.46)	60.75	(734.01)	51
G-105A	52.02	(735.42)	52.53	(734.91)	52
G-106A	36.44	(744.20)	53.44	(727.20)	51
G-107A	9.16	(764.30)	8.40	(765.06)	52
G-108S	16.84	(767.32)	16.19	(767.97)	51
G-108D	40.58	(744.61)	41.65	(743.54)	51
G-109	13.79	(771.86)	14.43	(771.22)	50
G-110	38.85	(766.94)	40.84	(764.95)	53
G-111	33.53	(775.95)	38.09	(771.39)	52
G-112	40.83	(772.68)	45.20	(768.31)	52
G-113	40.83	(765.27)	45.37	(760.73)	53

NOTES:

* Depth referenced to top of steel protective casing.

Monitoring Wells G-102 and G-112 were purged by bailing;
others by pumping.

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): Bailer				
SPL. NO.	SPL. LOCATION	DATE - TIME	SPL. TYPE		NO. OF BTLS.	NOTES		
			WATER					
			comp.	grab				
274	G101S	4-23-84 8:30		X	1			
275	G101D	4-23-84 8:35		X	1			
276	G113	4-23-84 8:50		X	1			
277	G112	4-23-84 9:05		X	1			
278	G112	4-23-84		X	1			
279	G111	4-23-84 9:30		X	1			
280	G110	4-23-84 9:45		X	1			
281	G111 QA Split			X	1			
282	G109	4-23-84 9:55		X	1			
283	G108S	4-23-84 10:10		X	1			
284	G108D	4-23-84 10:15		X	1			
285	G107A	4-23-84 12:15		X	1			
286	G106A	4-23-84 12:00		X	1			
RELINQUISHED BY		RECEIVED BY				DATE - TIME		
TESTING SERVICE CORPORATION		Aqualab, Inc.				4-23-84		

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188

L- 19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): Bailer			
SPL. NO.	SPL. LOCATION	DATE - TIME	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER				
			COMP.	grab			
287	G106A	4-23-84		X	1		
288	G105A	4-23-84 11:35		X	1		
289	G104A	4-23-84 11:15		X	1		
290	G105 QA Split	4-23-84		X	1		
291	G103	4-23-84 10:50		X	1		
292	G103	4-23-84		X	1		
293	G102	4-23-84 10:30		X	1		
RELINQUISHED BY		RECEIVED BY			DATE - TIME		
TESTING SERVICE CORPORATION		Aqualab, Inc.			4-23-84		

30 April 1984

55389-402

Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

4/23/84

4/23/84

FILTERED

	<u>pH</u> units	<u>Tot. Diss.</u> <u>Solids</u> mg/L	<u>Chloride</u> mg/L	<u>Iron</u> mg/L	<u>Lead</u> mg/L	<u>Zinc</u> mg/L
274 (G-100)	7.25	493.	16.	0.05	<0.01	0.029
275 (G-100)	7.37	627.	32.	0.04	<0.01	0.024
276 (G-100)	7.96	627.	4.	0.02	<0.01	0.009
279 (G-100)	7.22	787.	6.	0.02	<0.01	0.036
280 (G-100)	7.22	802.	4.	0.02	<0.01	0.025
281 (G-100)	7.28	822.	4.	0.02	<0.01	0.033
282 (G-100)	6.82	966.	2.	0.03	<0.01	0.032
283 (G-100)	7.27	630.	<1.	0.03	<0.01	0.013
284 (G-100)	7.43	720.	<1.	0.06	<0.01	0.019
285 (G-100)	7.02	492.	4.	<0.01	<0.01	0.012
288 (G-100)	7.18	1137.	14.	0.09	<0.01	0.022
289 (G-100)	7.49	520.	6.	0.02	<0.01	0.012
290 (G-100)	7.27	1110.	14.	0.02	<0.01	0.021
293 (G-100)	7.46	860.	<1.	0.02	<0.01	0.014

Robert N. Bucaro
Robert N. Bucaro

M.L.

aqualab inc.
 rt 20 at valley lane
 streamwood, illinois 60103
 312/289-3100

24 May 1984



analytical report

sample no. 55383

- Mr. Bruce Poynor
 TESTING SERVICE CORPORATION
 457 E. Gunderson
 Carol Stream IL 60188

SAMPLE DESCRIPTION:

277

-G112-(QA)

FILTERED

date taken: 4/23/84

date received: 4/23/84

Alkalinity (CaCO ₃)	348.	mg/L	Hardness (CaCO ₃)	1140.	mg/L
Arsenic	0.003	mg/L	Iron	<0.01	mg/L
Cadmium	<0.001	mg/L	Lead	0.07	mg/L
Calcium	244.	mg/L	Magnesium	137.	mg/L
Solids, tot. diss.	1913.	mg/L	Manganese	0.068	mg/L
Sulfate	1090.	mg/L	Mercury	<0.0002	mg/L
Chloride	266.	mg/L	Nickel	0.02	mg/L
Chromium	<0.001	mg/L	pH	7.38	units
COD	77.	mg/L	Phenol	<0.005	mg/L
Copper	0.017	mg/L	Potassium	14.3	mg/L
Zinc	0.031	mg/L			
Tin	<0.01	mg/L			

Robert N. Bucaro
 Robert N. Bucaro



24 May 1984

55384

Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 278 - 5.12

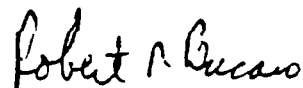
FILTERED

4/23/84

4/23/84

Alkalinity (CaCO ₃)	324.	mg/L
Arsenic	0.003	mg/L
Cadmium	<0.001	mg/L
Calcium	245.	mg/L
Solids, tot. diss.	2485.	mg/L
Sulfate	1080.	mg/L
Chloride	268.	mg/L
Chromium	<0.001	mg/L
COD	77.	mg/L
Copper	0.014	mg/L
Zinc	0.026	mg/L
Tin	<0.01	mg/L

Hardness (CaCO ₃)	1180.	mg/L
Iron	<0.01	mg/L
Lead	0.05	mg/L
Magnesium	134.	mg/L
Manganese	0.068	mg/L
Mercury	<0.0002	mg/L
Nickel	0.02	mg/L
pH	7.34	units
Phenol	<0.005	mg/L
Potassium	14.6	mg/L


Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100

24 May 1984



analytical report

sample no. 55385

• Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 286 - G106A

FILTERED

date taken: 4/23/84

date received: 4/23/84

Alkalinity (CaCO ₃)	314.	mg/L	Hardness (CaCO ₃)	1120.	mg/L
Arsenic	<0.001	mg/L	Iron	0.05	mg/L
Cadmium	<0.001	mg/L	Lead	0.07	mg/L
Calcium	439.	mg/L	Magnesium	0.089	mg/L
Solids, tot. diss.	3913.	mg/L	Manganese	0.012	mg/L
Sulfate	<5.	mg/L	Mercury	<0.0002	mg/L
Chloride	6.	mg/L	Nickel	0.03	mg/L
Chromium	<0.001	mg/L	pH	11.48	units
COD	33.	mg/L	Phenol	<0.005	mg/L
Copper	0.015	mg/L	Potassium	10.0	mg/L
Zinc	0.023	mg/L			
Tin	<0.01	mg/L			

Robert N. Bucaro
Robert N. Bucaro



24 May 1984

55386

Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 287 - *6/1/84*

FILTERED

4/23/84

4/23/84

Alkalinity (CaCO ₃)	328.	mg/L
Arsenic	<0.001	mg/L
Cadmium	<0.001	mg/L
Calcium	451.	mg/L
Solids, tot. diss.	3707.	mg/L
Sulfate	<5.	mg/L
Chloride	6.	mg/L
Chromium	<0.001	mg/L
COD	37.	mg/L
Copper	0.016	mg/L
Zinc	0.019	mg/L
Tin	<0.01	mg/L

Hardness (CaCO ₃)	1080.	mg/L
Iron	0.03	mg/L
Lead	0.10	mg/L
Magnesium	0.133	mg/L
Manganese	0.010	mg/L
Mercury	<0.0002	mg/L
Nickel	0.03	mg/L
pH	11.47	units
Phenol	<0.005	mg/L
Potassium	10.1	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



24 May 1984

analytical report

sample no. 55387

• Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 291 *G103*

FILTERED

date taken: 4/23/84

date received: 4/23/84

Alkalinity (CaCO ₃)	128.	mg/L	Hardness (CaCO ₃)	190.	mg/L
Arsenic	<0.001	mg/L	Iron	0.04	mg/L
Cadmium	<0.001	mg/L	Lead	0.03	mg/L
Calcium	75.1	mg/L	Magnesium	0.032	mg/L
Solids, tot. diss.	694.	mg/L	Manganese	0.006	mg/L
Sulfate	23.	mg/L	Mercury	<0.0002	mg/L
Chloride	2.	mg/L	Nickel	0.02	mg/L
Chromium	<0.001	mg/L	pH	10.97	units
COD	33.	mg/L	Phenol	<0.005	mg/L
Copper	0.003	mg/L	Potassium	17.1	mg/L
Zinc	0.006	mg/L			
Tin	<0.01	mg/L			

Robert N. Bucaro
Robert N. Bucaro



24 May 1984

55388

Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 292 *G102*

FILTERED

4/23/84

4/23/84

Alkalinity (CaCO ₃)	106.	mg/L
Arsenic	0.001	mg/L
Cadmium	<0.001	mg/L
Calcium	74.7	mg/L
Solids, tot. diss.	803.	mg/L
Sulfate	24.	mg/L
Chloride	2.	mg/L
Chromium	<0.001	mg/L
COD	40.	mg/L
Copper	0.006	mg/L
Zinc	0.006	mg/L
Tin	<0.01	mg/L

Hardness (CaCO ₃)	202.	mg/L
Iron	0.06	mg/L
Lead	0.04	mg/L
Magnesium	0.043	mg/L
Manganese	0.004	mg/L
Mercury	<0.0002	mg/L
Nickel	<0.01	mg/L
pH	10.98	units
Phenol	<0.005	mg/L
Potassium	18.3	mg/L

Robert N. Bucaro
Robert N. Bucaro



TESTING SERVICE CORPORATION

457 East Gundersen Drive, Carol Stream, Illinois 60188

Consultation services
Foundation and site exploration
Testing of soils, concrete
and bituminous materials
Groundwater monitoring and
hydrogeologic studies

Telephone 312 653-3920

September 11, 1984

FOREST PRESERVE DISTRICT
OF DU PAGE COUNTY
P. O. Box 2339
Glen Ellyn, Illinois 60138

Attention: Mr. Scott Gerrick
Environmental Control Manager
Governmental Services Dept.

RE: L - 19,559A
MALLARD LAKE SITE

Dear Mr. Gerrick:

We have completed the July, 1984 purging and sampling work for the monitoring wells at the above mentioned site and have received the test results from Aqualab, Inc. Our field procedures in performing this work are as outlined in a previous correspondence dated September 6, 1983, with the above job number. All wells were purged using a submersible pump, except Wells G-102, G-108D and G-112, which were purged by bailing.

The water level measurements and water sample temperatures are shown on an enclosed Field Data Chart.

The water samples were tested by Aqualab, Inc. for the following six (6) parameters: pH, Total Dissolved Solids, Chloride, Iron, Lead and Zinc. Cadmium and COD, due to a misunderstanding were also tested. The results obtained from these samples are shown on the enclosed Aqualab, Inc. Analytical Reports. The identity of the sample numbers can be determined by the enclosed Chain of Custody Record.

We have reviewed the analytical data and compared it to results from the previous five (5) quarters. No unusual or significant changes were noted.

It has been a pleasure to assist you with this project. Please call if there are any questions.

Respectfully submitted,

TESTING SERVICE CORPORATION

Lawrence A. DuBose
President

Prepared by:

Daniel J. Plomb
Geologist

LAD:DJP:js

Enclosures:

Dr. Lawrence A. DuBose
President

Charles C. Luther
Executive Vice-President

Lyle E. Thompson
Vice-President

Noble D. Moran
Vice-President

Bruce Poynor
Engineering Geologist

FIELD DATA CHART				
MONITORING WELL	WATER LEVEL			WATER TEMPERATURE °F
	DEPTH* IN FEET AND ELEVATION			
	PRIOR TO PURGING 7-17-84		PRIOR TO SAMPLING 7-18-84	
G-101S	11.33	(793.31)	17.06 (787.58)	51
G-101D	37.94	(766.64)	49.28 (755.30)	50
G-102	42.95	(766.00)	43.55 (765.40)	49
G-103	43.24	(758.04)	55.72 (735.94)	51
G-104A	64.35	(730.41)	65.34 (729.42)	49
G-105A	57.06	(730.38)	58.04 (729.37)	50
G-106A	40.31	(740.33)	50.24 (730.4)	50
G-107A	13.05	(760.41)	13.28 (760.18)	51
G-108S	14.99	(769.17)	15.50 (768.66)	50
G-108D	40.03	(745.16)	47.32 (737.87)	Not Possible Insufficient Sample
G-109	15.74	(769.91)	21.70 (763.95)	50
G-110	38.80	(766.99)	43.27 (762.52)	49
G-111	34.71	(774.77)	39.16 (770.32)	51
G-112	48.48	(765.03)	48.78 (764.73)	51
G-113	40.69	(765.41)	47.62 (758.48)	51

NOTES:

* Depth referenced to top of steel protective casing.

Monitoring Wells G-102, G-108D & G-112 were purged by bailing; others by submersible pump.

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

PAGE 1 OF 2

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): D. Plomb			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER				
			COMPO.	grab			
407	G 101D	7-18 8:10		X	1		
408	G 101S	7-18 8:15		X	1		
409	G 113	7-18 8:25		X	1		
410	G 112	7-18 8:35		X	1		
411	G 111	7-18 8:50		X	1		
412	G 112 QA Split	7-18 8:35		X	1		
413	G 110	7-18 8:57		X	1		
414	G 109	7-18 9:40		X	1		
415	G 108S	7-18 9:50		X	1		
416	G 108D	7-18 9:55		X	1		
417	G 107A	7-18 10:05		X	1		
418	G 106A	7-18 10:15		X	1		
419	G 105A	7-18 10:30		X	1		
RELINQUISHED BY		RECEIVED BY			DATE - TIME		
TESTING SERVICE CORPORATION		AQUALAB, INC.			7-18-84		

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

PAGE 2 OF 2

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): D. Plomb			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER				
			comp.	grab			
420	G 106A QA Split	7-18 10:45		X	1		
421	G 104A	7-18 10:55		X	1		
422	G 103	7-18 11:00		X	1		
423	G 102	7-18 11:20		X	1		
RELINQUISHED BY		RECEIVED BY			DATE - TIME		
TESTING SERVICE CORPORATION		AQUALAB, INC.			7-18-84		

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



31 July 1984

analytical report

sample no. 57559-575

Mr. Bruce Poynor
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

date taken: 7/18/84

date received: 7/18/84 1145

FILTERED

	<u>pH</u> units	<u>Tot. Diss.</u> <u>Solids</u> mg/L	<u>Chloride</u> mg/L	<u>Lead</u> mg/L	<u>Cadmium</u> mg/L	<u>COD</u> mg/L
407	7.24	300.	34.	<0.01	<0.001	<3.
408	7.15	420.	14.	<0.01	<0.001	<3.
409	7.51	200.	2.	<0.01	<0.001	17.
410	7.02	2620.	102.	<0.01	0.007	64.
411	7.20	520.	4.	<0.01	0.003	23.
412	7.28	2715.	104.	<0.01	0.006	57.
413	7.15	715.	2.	<0.01	<0.001	7.
414	6.89	1800.	2.	<0.01	0.004	7.
416	6.95	1465.	2.	<0.01	0.005	44.
415	6.95	585.	<1.	<0.01	<0.001	33.
417	7.03	425.	4.	<0.01	<0.001	7.
418	9.94	3216.	4.	<0.01	0.004	<3.
419	7.01	765.	32.	<0.01	<0.001	23.
420	9.99	3060.	2.	<0.01	0.004	<3.
421	7.11	540.	<1.	<0.01	<0.001	20.
422	9.65	630.	<1.	<0.01	<0.001	40.
423	6.96	630.	2.	<0.01	<0.001	<3.

Robert N. Bucaro
Robert N. Bucaro



aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



24 August 1984

analytical report

sample no. 57559A-57634A

Mr. Bruce Poyner
TESTING SERVICE CORPORATION
457 Gunderson
Carol Stream IL 60187

date taken:

date received: 8/13/84

Filtered:

<u>Sample Description</u>	<u>Iron</u> mg/L	<u>Zinc</u> mg/L
407	0.04	<0.001
408	<0.01	0.022
409	<0.01	<0.001
410	<0.01	0.021
411	<0.01	<0.001
412	0.12	0.042
413	<0.01	<0.001
414	<0.01	0.031
415	0.02	<0.001
416	0.02	0.032
417	<0.01	<0.001
418	0.02	0.033
419	0.02	0.007
420	0.03	0.040
421	<0.01	0.007
422	0.02	0.017
423	<0.01	0.007
424	<0.01	0.028

Robert N. Bucaro
Robert N. Bucaro

continued...



file copy

NOVEMBER 7, 1984


TO: SUPERINTENDENT UTT
FROM: ENVIRONMENTAL CONTROL MANAGER GERRICK
RE: MALLARD LAKE WATER QUALITY - OCTOBER 1984

Attached for your review are the water quality reports from the monitoring wells at Mallard Lake landfill.

I have contacted Testing Service Corporation to obtain water samples from Heil's office for up gradient background information during the December sampling round.

cj

Attachment

cc: J. Hartwig 



TESTING SERVICE CORPORATION

457 East Gundersen Drive, Carol Stream, Illinois 60188

Consultation services
Foundation and site exploration
Testing of soils, concrete
and bituminous materials
Groundwater monitoring and
hydrogeologic studies

Telephone 312 653-3920

November 1, 1984

FOREST PRESERVE DISTRICT
OF DU PAGE COUNTY
P. O. Box 2339
Glen Ellyn, Illinois 60138

Attention: Mr. Scott Gerrick
Environmental Control Manager
Governmental Services Dept.

RE: L - 19,559A
MALLARD LAKE SITE

Dear Mr. Gerrick:

We have completed the October, 1984 purging and sampling work for the above referenced site and have received the test results from Aqualab, Inc. Our field procedures in performing this work are outlined in a previous correspondence dated September 6, 1983, with the above job number. Due to the failure of our submersible pump during the course of the work, Wells G-102 thru G-109 were purged by bailing. Wells G-101S, G-101D and Wells G-110 and G-113 were purged by a submersible pump prior to its failure.

Water level measurements and water sample temperatures, along with a depth measurement to the bottom of the well or sediment inside the casing, are shown on an enclosed Field Data Chart.

The water samples were tested by Aqualab, Inc. for the following six (6) parameters: ph, Total Dissolved Solids, Chloride, Lead and Zinc. The results obtained from these are shown on the enclosed Aqualab, Inc.. Analytical Report. The identity of the sample numbers can be determined by the enclosed Chain of Custody Record.

Also enclosed is an electronic spreadsheet for each well from our computer file established for this project. This lists the analytic data recently obtained, as well as the previous six (6) quarters, and compares them. Review of this data shows a steady decrease in the concentration of Total Dissolved Solids in Well G-103 between January, 1984 and the present. No other unusual or significant changes were noted.

It has been a pleasure to assist you with this project. Please call if there are any questions.

Respectfully submitted,

TESTING SERVICE CORPORATION

Lawrence A. DuBose
President

LAD:DJP:js

Dr. Lawrence A. DuBose
President

Charles C. Luther
Executive Vice-President

Lyle E. Thompson
Vice-President

Prepared by:

Daniel J. Plomb
Geologist

Noble D. Moran
Vice-President

Bruce Poynor
Engineering Geologist

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



22 October 1984

analytical report

sample no. 59324-335

Mr. Bruce Poyner
TESTING SERVICE CORPORATION
457 E. Gunderson
Carol Stream IL 60188

date taken:

date received: 10/5/84 1200

Filtered First:

<u>Sample Description</u>	<u>pH</u> units	<u>Chloride</u> mg/L	<u>Solids, tot. diss.</u> mg/L	<u>Iron</u> mg/L	<u>Zinc</u> mg/L	<u>Lead</u> mg/L
541 G1010	7.27	28.	370.	0.04	0.004	<0.01
542 G1015	6.95	14.	440.	<0.01	0.012	<0.01
543 G113	7.31	2.	240.	0.02	0.003	<0.01
544 G112	6.88	78.	1245.	0.09	0.008	<0.01
545 G111	7.09	4.	505.	<0.01	0.008	<0.01
546 G110	7.11	4.	680.	0.11	0.006	<0.01
547 G109	6.89	6.	1830.	0.03	0.021	<0.01
549 G1085	6.70	2.	520.	<0.01	0.010	<0.01
550 G107A	7.07	<1.	455.	0.04	0.032	<0.01
*551 G106A	10.72	4.	2610.	0.03	0.007	<0.01
552 G105A	7.10	30.	660.	0.02	0.010	<0.01
• 553 G102	7.10	2.	555.	0.02	0.005	<0.01
(G11) 554 G106A	10.72	4.	2400.	0.04	0.009	<0.01
555 G104	7.27	<1.	510.	0.02	0.008	<0.01
556 G103	9.82	2.	205.	0.08	0.004	<0.01
• (G11) 557 G102	7.10	2.	655.	<0.01	0.006	<0.01

Robert N. Bucaro
Robert N. Bucaro

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): D. Plomb			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE			NO. OF BTLS.	NOTES
			WATER COMP.	grab			
541	G 101 D	10-6 8:15		X		1	
542	G 101 S	10-6 8:20		X		1	
543	G 113	10-6 8:25		X		1	
544	G 112	10-6 8:35		X		1	
545	G 111	10-6 8:50		X		1	
546	G 110	10-6 9:00		X		1	
547	G 109	10-6 9:10		X		1	
549	G 108 S	10-6 9:25		X		1	
550	G 107 A	10-6 9:40		X		1	
551	G 106 A	10-6 9:50		X		1	
552	G 105 A	10-6 10:10		X		1	
553	G 102	10-6 10:55		X		1	
RELINQUISHED BY		RECEIVED BY				DATE - TIME	
TESTING SERVICE CORPORATION		AQUALAB, INC.					

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L-19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE SITE		SAMPLER(S): D. Plomb			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER				
			COND.	Grab			
554	G 106 A QA Split	10-5 9:50		X	1		
555	G 104	10-5 10:30		X	1		
556	G 103	10-5 10:40		X	1		
557	G 102 QA Split	10-5 10:55		X	1		
RELINQUISHED BY		RECEIVED BY			DATE - TIME		
TESTING SERVICE CORPORATION		AQUALAB, INC.					

FIELD DATA CHART						
MONITORING WELL	WATER LEVEL				WATER TEMP. F°	DEPTH TO BOTTOM OF WELL, OR SEDIMENT INSIDE CASING
	DEPTH* IN FEET AND ELEVATION					
	PRIOR TO PURGING 10-3-84		PRIOR TO SAMPLING 10-5-84			
G-101S	11.78	(792.86)	16.37	(788.27)	51	23.42 (781.22)
G-101D	39.63	(764.95)	50.35	(754.28)	50	53.87 (751.71)
G-102**	42.97	(765.98)	43.24	(765.71)	XX	48.21 (760.74)
G-103**	44.70	(756.57)	53.24	(728.04)	51	58.99 (742.29)
G-104A**	66.23	(728.53)	66.91	(727.85)	50	94.65 (700.11)
G-105A**	58.99	(728.45)	61.29	(726.15)	49	102.31 (685.13)
G-106A**	43.43	(737.21)	63.45	(717.19)	48	72.90 (707.74)
G-107A**	16.12	(757.34)	16.19	(757.27)	51	32.83 (740.63)
G-108S**	14.77	(769.39	15.50	(768.66)	49	29.31 (754.85)
G-108D**	44.23	(740.96)	47.95	(737.24)	XX	48.31 (736.88)
G-109**	20.02	(765.63)	23.28	(762.37)	49	33.71 (751.94)
G-110	40.96	(764.83)	45.58	(760.21)	50	46.34 (759.45)
G-111	36.00	(773.48)	41.62	(767.86)	XX	42.41 (767.07)
G-112	49.23	(764.28)	49.95	(763.56)	52	58.61 (754.90)
G-113	41.60	(764.50)	48.69	(757.41)	49	52.98 (753.12)

NOTES:

* Depth referenced to top of steel protective casing.

** Well purged via a bailer due to failure to submersible pump.

XX Insufficient Sample

FILE
copy

MARCH 19, 1985

TO: SUPERINTENDENT UTT
FROM: SCOTT GERRICK, ENVIRONMENTAL CONTROL MANAGER
RE: MALLARD LAKE DECEMBER 1984 WATER QUALITY REPORT

Attached for your review are the water quality analysis from the monitoring wells at Mallard Lake Landfill in December 1984. Water quality was also checked from E & E's office supply well.

No unusual or significant changes were noted.

cj

Attachment

cc: A. White
J. Hartwig
J. Wiggins, Ill. E.P.A.



TESTING SERVICE CORPORATION

457 EAST GUNDERSEN DR. • CAROL STREAM, ILLINOIS 60188-2492

Dr. Lawrence A. DuBose, P.E., S.E. *President*
Charles C. Luther, P.E. *Executive Vice-President*
Noble D. Moran *Vice-President*
Bruce R. Poynor *Engineering Geologist*
Charles R. DuBose, P.E.
Thomas J. Morris, P.E.
Scott B. Stueland, P.E.
Telephone 312 653-3920

March 15, 1985

FOREST PRESERVE DISTRICT
OF DU PAGE COUNTY
P. O. Box 2339
Glen Ellyn, Illinois 60138

Attention: Mr. Scott Gerrick
Environmental Control Mgr.
Governmental Services Dept.

RE: L - 19,559A
MALLARD LAKE SITE

Dear Mr. Gerrick:

We have completed the December, 1984 purging and sampling work for the above referenced site and have received the analytical results from Aqualab, Inc. Our field procedures in performing this work are as outlined in previous correspondence dated September 6, 1983, with the above number. Due to low water levels, or in-accessibility, Monitoring Wells G-102, G-107A, G-109, G-110 and G-111 were purged via bailer.

Water samples obtained from the monitoring wells and the leachate collection manhole were analyzed by Aqualab, Inc. for the following parameters: pH, Total Dissolved Solids, Chloride, Lead and Zinc. Data for Chromium are also included. This is because Chromium was originally analyzed rather than Chloride as intended. A water sample was also obtained from the E & E Hauling supply well at the site. This sample was analyzed for Alkalinity, Arsenic, Barium, Calcium, Chloride, Chromium, COD, Copper, Cyanide, Hardness, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Nitrogen, pH, Phenols, Potassium, Sodium, Solids (Total Dissolved), Sulfate, Zinc and TOC. The results obtained are shown on the enclosed Aqualab, Inc. Analytical Report. The identity of the sample numbers can be determined from the enclosed Chain of Custody Record.

Also enclosed are electronic spreadsheets for each well from our computer file established for this project. This lists the analytical data obtained this quarter as well as the previous seven (7) quarters, and compares them. No unusual or significant changes were noted.

Water level measurements and water sample temperatures, along with a depth measurement to the bottom of the well or sediment inside the casing, are shown on both the electronic spreadsheets and the enclosed Field Data Chart.

March 15, 1985
FOREST PRESERVE DISTRICT
OF DU PAGE COUNTY
Attention: Mr. Scott Gerrick

L - 19,559A
Page 2

It has been a pleasure to assist you with this project. Please call if there are any questions or if we can be of any further service.

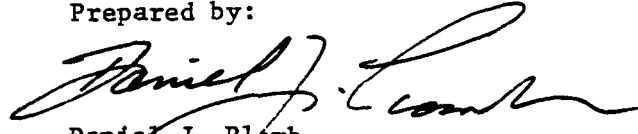
Respectfully submitted,

TESTING SERVICE CORPORATION



Lawrence A. DuBose
President

Prepared by:



Daniel J. Plomb
Geologist

LAD:DJP:js

Enclosures:

FIELD DATA CHART

MONITORING WELL	DATE 1984		WATER LEVEL DEPTH* IN FT. WITH ELEVATION				WATER TEMP °F	DEPTH* TO BOTTOM OF WELL OR SEDIMENT INSIDE CASING
	PURGED	SAMPLED	PRIOR TO PURGING		PRIOR TO SAMPLING			
G-101S	12-13-84	12-14-84	12.02	(792.62)	21.00	(783.64)	50	23.5
G-101D	12-13-84	12-14-84	39.11	(765.47)	48.87	(755.71)	49	54.6
G-102**	12-13-84	12-14-84	41.73	(767.22)	42.81	(766.14)	50	46.9
G-103	12-13-84	12-14-84	44.30	(756.98)	56.84	(744.44)	50	59.5
G-104A	12-13-84	12-14-84	64.88	(729.88)	64.83	(729.83)	49	95.6
G-105A	12-13-84	12-14-84	55.63	(731.81)	55.58	(731.86)	49	102.3
G-106A	12-13-84	12-14-83	42.12	(738.52)	65.19	(715.45)	50	72.3
G-107A**	12-13-84	12-14-84	17.41	(756.05)	18.32	(755.14)	50	32.8
G-108S	12-13-84	12-14-84	17.84	(766.32)	18.01	(766.15)	50	21.9
G-108D	12-13-84	12-14-84	38.47	(746.72)	42.24	(742.95)	Insufficient Sample	48.3
G-109**	12-13-84	12-14-84	20.53	(765.12)	25.48	(760.17)	50	33.7
G-110**	12-13-84	12-14-84	40.72	(765.07)	45.75	(760.04)	49	47.4
G-111**	12-13-84	12-14-84	39.05	(771.43)	40.97	(768.51)	Insufficient Sample	42.4
G-112	12-13-84	12-14-84	49.18	(764.33)	49.48	(764.03)	49	58.6
G-113	12-13-84	12-14-84	41.48	(764.62)	47.03	(759.07)	49	53.0
NOTES: * Depths referenced to top of steel protector casing cap. ** Indicates wells purged via bailer due to low water levels or inaccessibility of well to drill rig.								

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE		SAMPLER(S): D. Plomb & R. Harris				
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES		
			WATER					
			COND.	stab				
675	G-101S	12-14 7:55		X	1			
676	G-101D	12-14 7:45		X	1			
677	G-102	12-14 8:05		X	1			
678	G-103	12-14 8:10		X	1			
679	G-101S QA Split	12-14 7:55		X	1			
680	G-104	12-14 8:20		X	1			
681	G-113	12-14 8:40		X	1			
682	G-112	12-14 8:45		X	1			
683	G-111	12-14 8:55		X	1			
684	G-110	12-14 9:20		X	1			
685	G-109	12-14 9:35		X	1			
686	G-108S	12-14 9:50		X	1			
687	G-108D	12-14 9:55		X	1			
RELINQUISHED BY		RECEIVED BY				DATE - TIME		
TESTING SERVICE CORPORATION		AQUALAB, INC.				12-14-85		

TESTING SERVICE CORPORATION
487 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
L- 19,559A

CHAIN OF CUSTODY RECORD

CLIENT: FOREST PRESERVE DISTRICT OF DU PAGE COUNTY		PROJ: MALLARD LAKE		SAMPLER(S): D. Plomb & R. Harris			
SPL. NO.	SPL. LOCATION	DATE - TIME 1984	SPL. TYPE		NO. OF BTLS.	NOTES	
			WATER				
			COND.	stab			
688	MANHOLE: Leachate Collection System	12-14 10:05		X	4		
689	G-105A	12-14 10:20		X	1		
690	G 106A	12-14 10:40		X	1		
691	G-108A QA Split	12-14 9:55		X	1		
692	G-107A	12-14 10:55		X	1		
693	E & E BUILDING	12-14 11-15		X	2		
RELINQUISHED BY		RECEIVED BY			DATE - TIME		
TESTING SERVICE CORPORATION		AQUALAB, INC.			12-14-85		

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



5 March 1985

ANALYTICAL REPORT

Sample No. 60806A-823A

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

Date Requested: 2/22/85

<u>Sample Description</u>	<u>Chloride</u> <u>mg/L</u>
675	14.
676	32.
677	<1.
678	2.
679	14.
680	2.
681	<1.
682	126.
683	2.
684	2.
685	2.
686	2.
687	4.
688	216.
689	36.
690	2.
691	4.
692	4.

Robert N. Bucaro

Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60806

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 675

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.38	units
Solids, tot. diss.	467.	mg/L
Zinc	<0.001	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60807

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 676

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.40	units
Solids, tot. diss.	457.	mg/L
Zinc	0.003	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60808

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 677

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.26	units
Solids, tot. diss.	627.	mg/L
Zinc	<0.001	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60809

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 678

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	0.03	mg/L
Lead	<0.01	mg/L
pH	11.06	units
Solids, tot. diss.	1287.	mg/L
Zinc	<0.001	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60810

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 679

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.02	units
Solids, tot. diss.	590.	mg/L
Zinc	0.007	mg/L

Robert A. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60811

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 680

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.09	units
Solids, tot. diss.	547.	mg/L
Zinc	0.006	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60812

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 681

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.39	units
Solids, tot. diss.	410.	mg/L
Zinc	0.003	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60813

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 682

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.83	units
Solids, tot. diss.	2063.	mg/L
Zinc	0.010	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60814

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 683

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.27	units
Solids, tot. diss.	550.	mg/L
Zinc	0.003	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60815

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 684

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.38	units
Solids, tot. diss.	523.	mg/L
Zinc	<0.001	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60816

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 685

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.84	units
Solids, tot. diss.	1313.	mg/L
Zinc	0.017	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60817

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 686

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	6.60	units
Solids, tot. diss.	670.	mg/L
Zinc	0.012	mg/L

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60818

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 687

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.58	units
Solids, tot. diss.	1460.	mg/L
Zinc	0.005	mg/L

Robert N. Bucaro
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aqualab inc.

850 W. Bartlett Road
Bartlett, Illinois 60103
312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60819

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 688

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.58	units
Solids, tot. diss.	2183.	mg/L
Zinc	0.005	mg/L

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11 February 1985

ANALYTICAL REPORT

Sample No. 60820

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 689

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.02	units
Solids, tot. diss.	757.	mg/L
Zinc	<0.001	mg/L

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11 February 1985

ANALYTICAL REPORT

Sample No. 60821

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 690

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	11.31	units
Solids, tot. diss.	2810.	mg/L
Zinc	0.005	mg/L

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312/289-3100



11 February 1985

ANALYTICAL REPORT

Sample No. 60822

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 691

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	0.09	mg/L
Lead	<0.01	mg/L
pH	7.55	units
Solids, tot. diss.	1593.	mg/L
Zinc	0.006	mg/L

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11 February 1985

ANALYTICAL REPORT

Sample No. 60823

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 692

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Chromium, tot.	<0.001	mg/L
Iron	<0.01	mg/L
Lead	<0.01	mg/L
pH	7.10	units
Solids, tot. diss.	507.	mg/L
Zinc	0.006	mg/L

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11 February 1985

ANALYTICAL REPORT

Sample No. 60824

Mr. Bruce Poyner
TESTING SERVICE CORP.
457 E. Gunderson
Carol Stream IL 60188

SAMPLE DESCRIPTION: 693

Date Taken: 12/14/84

Date Received: 12/14/84

Filtered:

Alkalinity (CaCO ₃)	216.	mg/L
Arsenic	<0.001	mg/L
Barium	<0.01	mg/L
Cadmium	<0.001	mg/L
Chloride	60.	mg/L
Chromium, tot.	<0.001	mg/L
COD	208.	mg/L
Copper	<0.001	mg/L
Cyanide, tot.	<0.001	mg/L
Hardness (CaCO ₃)	380.	mg/L
Iron, tot.	<0.01	mg/L
Lead	<0.01	mg/L
Magnesium	45.5	mg/L
Manganese	0.012	mg/L
Mercury	<0.0001	mg/L
Nickel	<0.01	mg/L
Nitrogen, ammonia	0.31	mg/L
pH	7.32	units
Phenols	<0.002	mg/L
Potassium	2.40	mg/L
Sodium	43.6	mg/L
Solids, tot. diss.	616.	mg/L
Sulfate	135.	mg/L
Zinc	0.059	mg/L
TOC	14.2	mg/L

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